



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/595,572

04/27/2006

Hee Young Lee

1114.003

2878

21176

7590

06/02/2009

SUMMA, ADDITON & ASHE, P.A.
11610 NORTH COMMUNITY HOUSE ROAD
SUITE 200
CHARLOTTE, NC 28277

EXAMINER

DOUKAS, MARIA E

ART UNIT

PAPER NUMBER

3767

MAIL DATE

DELIVERY MODE

06/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,572	Applicant(s) LEE, HEE YOUNG	
	Examiner MARIA E. DOUKAS	Art Unit 3767	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/22/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to communication filed on 12/22/2008. Claims 1-13 remain pending in this application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korean Application No. 20-2003-0021484 to Lee (Lee) in view of U.S. Patent No. 3,779,383 to Ayres (Ayres).

In Reference to Claim 1

Lee teaches a syringe piston used in fat transplantation comprising a piston body without the shaft (40), the piston moveable within the cylindrical vessel by positive and negative pressures that are pneumatically introduced (Figures 1-3; translation p. 4, lines 4-5, wherein pressure is applied to the container); a free oil discharge hole (41c) communicated with the front and rear side of the piston body (Figure 1); an opening and closing device (50 and stopper in Figure 3) for opening and closing the free oil discharge hole (translation p. 6, lines 5-6, 10-12); and a filtering device (41) disposed in

Art Unit: 3767

a passage through which free oil is discharged to filter fat and pass the free oil (Figure 1); wherein one end of the vessel in a first mode operation supports a cannula (100) for pneumatically suctioning fat (Figure 1) and pneumatically discharging separated fat (Figure 3); and wherein the one end in a second mode supports a front cap (120) for preventing the free oil and fat from exiting the vessel during separation (Figure 2). Lee fails to teach a packing coupled to the piston body to form a seal between the piston body and the vessel. Ayres teaches a piston 40 with sealing rings 50 coupled to the outer surface of the piston body in order to provide a means to maintain sealing contact of the piston body with the vessel wall during its path of travel (col. 4, lines 4-10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Lee to have the sealing rings around the piston body as taught by Ayres in order to provide a means to maintain sealing contact of the piston body with the vessel wall during its path of travel (col. 4, lines 4-10).

In Reference to Claims 2 and 3

Lee in view of Ayres teaches the device of claim 1 (see rejection of claim 1 above). Ayres teaches wherein a weight (metal insert 52) that takes the form of a metal ring is coupled with the rear side of the piston body (Figure 5; col. 3, line 59-col. 4, line 4) in order to provide added weight to the weight of the syringe piston so that the piston is capable of overcoming the sealing forces of the packing (sealing rings 50) to move along the inside wall of the vessel (col. 4, lines 49-57).

Art Unit: 3767

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Lee to have the metal insert as taught by Ayres coupled to the rear side of the piston body in order to provide added weight to the weight of the syringe piston so that the piston is capable of overcoming the sealing forces of the packing (sealing rings 50) to move along the inside wall of the vessel (col. 4, lines 49-57).

In Reference to Claim 4

Lee in view of Ayres teaches the device of claims 1 and 2 (see rejection of claims 1 and 2 above). Lee further teaches wherein the filter has a pore diameter between 5-50 microns (translation p. 4, line 22; see MPEP §2144.05 for obviousness of ranges).

In Reference to Claims 7 and 8

Lee in view of Ayres teaches the device of claims 1, 2, and 4 (see rejections above) and Lee further teaches wherein the opening and closing device comprises: a packing for covering the rear end of the piston and a closing screw for fixing the packing (Figure 3). Lee teaches a single free oil discharging hole penetrating the piston body. Ayres teaches a plurality of holes (apertures 42) penetrating the front and rear end of the piston body 40 (Figures 4 and 5) in order to control the passage of fluid through the piston body (col. 4, lines 1-38).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the piston of Lee to have a plurality of holes as

Art Unit: 3767

taught by Ayres in order to control the passage of fluid through the piston body (col. 4, lines 1-38). Further, it has been held that a mere duplication of the essential working parts of a device involves only routine skill in the art (see MPEP §2144.04), so it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made a plurality of oil discharge holes through the piston body of Lee.

In Reference to Claims 9-11

Lee in view of Ayres teaches the device of claims 1, 2, and 7 (see rejection of claims above). Lee further teaches a cap for sealing the front side of the free oil discharge hole (Figure 1); an outer filtering circumference disposed in the piston body (Figure 1, wherein 41 is disposed within the front of the piston body) to maintain a predetermined gap between the piston body and the inner circumference of the vessel such that fat is filtered and the free oil passes through (41 disposed within and part of the piston is mushroom shaped and therefore provides a gap between that part of the piston and the vessel wall); and a through hole (holes 41a in 41 in Figure 1) formed between the outer filtering circumference and communicating between the free oil hole (41c) of the piston body and the cap. Although the size of the predetermined gap is not explicitly taught, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the gap size to fall within the claimed range, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (*In re Aller*, 105 USPQ 233).

3. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korean Application No. 20-2003-0021484 to Lee (Lee) in view of U.S. Patent No. 3,779,383 to Ayres (Ayres) as applied to claim 4 above, and further in view of U.S. Patent No. 5,549,816 to Harp (Harp).

In Reference to Claims 5 and 6

Lee in view of Ayres teaches the device of claim 4 (see rejection of claim 4 above) but fails to teach a filter groove in the front of the piston that is closed by a cap having a thread and a plurality of holes and that includes a protrusion in the front end. Harp teaches a filter (filter media 20) coupled with a filter groove (threads 16C) formed in the front end of a piston body (piston 16; Figure 1). The filter groove is closed by a cap (cap 18) having a thread (col. 2, lines 62-63) and a plurality of holes (apertures 18A) and has a protrusion in the front side (Figure 1). Harp teaches this structure in order to separate the piston from a barrel without damaging the filter media thereby enabling the filter to be reusable and changed at any time by releasing the cap (col. 3, lines 28-33).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Lee in view of Ayres to have a filter groove in the front end of the piston body that the filter couples to as well as to have a cap with a thread and apertures closing the filter as taught by Harp in order to separate

Art Unit: 3767

the piston from a barrel without damaging the filter media thereby enabling the filter to be reusable and changed at any time by releasing the cap (col. 3, lines 28-33).

4. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korean Application No. 20-2003-0021484 to Lee (Lee) in view of U.S. Patent No. 3,779,383 to Ayres (Ayres) as applied to claims 1 and 2 above, and further in view of U.S. Patent No. 3,799,342 to Greenspan (Greenspan).

In Reference to Claims 12 and 13

Lee in view of Ayres teaches the device of claims 1 and 2 (see rejection of claims 1 and 2 above). Lee further teaches a single central hole (41c) for the free oil discharging hole and first and second check valves (50, 71; Figure 2) disposed at the sides of the discharge hole (Figure 2). Lee fails to teach fixing covers having through-holes at the central portions to fix the check valves to the piston body. Greenspan teaches a piston (plug 18) that comprises check valves 26 as well as a fixing covers (rubber disc 20) having through-holes formed at the central portion (holes 30) to fix the valves to the piston body (Figure 1 and 4). Greenspan teaches the valve and fixing cover assembly in order to control the passage of materials through the piston body (col. 1, lines 59-63).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the piston of Lee in view of Ayres to have the

Art Unit: 3767

valve structure with fixing covers and through holes as taught by Greenspan in order to control the passage of materials through the piston body (col. 1, lines 59-63).

Response to Arguments

5. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIA E. DOUKAS whose telephone number is

Art Unit: 3767

(571)270-5901. The examiner can normally be reached on Monday - Friday 7:30 AM - 5:00 PM EDT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Simons can be reached on (571)272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MD

/Nicholas D Lucchesi/
Supervisory Patent Examiner, Art Unit 3763